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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/730,684	12/08/2003	David B. Watson	15823-010001	4359
26231	7590	08/30/2006	EXAMINER	
FISH & RICHARDSON P.C. P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			RODRIGUEZ, WILLIAM H	
			ART UNIT	PAPER NUMBER
			3746	

DATE MAILED: 08/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/730,684

Applicant(s)

WATSON ET AL.

Examiner

William H. Rodriguez

Art Unit

3746

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 12-27 and 29-35 is/are pending in the application.
- 4a) Of the above claim(s) 18-26 and 32-35 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 15-17 is/are allowed.
- 6) ☒ Claim(s) 1-3, 5-7, 9, 12-14, 27, 29 and 31 is/are rejected.
- 7) ☒ Claim(s) 4, 8 and 30 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____.

DETAILED ACTION

This office action is in response to the amendment and remarks filed 7/5/06. Since the examiner has applied new grounds of rejection, this office action is being made non-final to afford the applicant the opportunity to respond to the new grounds of rejection.

Drawings

1. The drawings were received on 7/5/06. These drawings are approved.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-3, 5, 7, 9, 12, 14, 27, 29 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by **Kueck et al. (US 5,628,191)**.

With respect to claims 1, 2, 12, 27 and 31, in Figure 1 **Kueck** teaches a system comprising: a supply of pressurized natural gas at high pressure, a heat exchanger/pre-heater 12 for heating the pressurized gas before entering a gas expansion engine 13, said gas expansion engine driving a generator (30 in Figure 2) and expanding said pre-heated pressurized gas to a to a lower pressure, said low pressure natural gas being feed into a municipality gas distribution network which delivers said low pressure gas to the users. See particularly cl. 1 ll. 1-6; cl. 1 ll. 19-22; cl. 1 ll. 40-44; cl. 4 ll. 5-8; cl. 4 ll. 21-26; and Figures 1-2.

Note: The user's low pressure gas consuming device can be (stove, furnace, fire place) or the gas expansion device 15 can also be called the low pressure gas consuming device.

With respect to claim 3, **Kueck** teaches that the source of heat comes from a recovered waste heat from reciprocating engine(s) driving at least one secondary electric generator. See cl. 1 ll. 40-45.

With respect to claim 5, **Kueck** teaches that the source of heat comes from a recovered waste heat from a plant's process 16 via a heat exchanger 12. See particularly Figure 1.

With respect to claim 7, **Kueck** teaches that the source of heat comes from a recovered waste heat from flue gas of process plant 16. See particularly Figure 1.

With respect to claim 9, **Kueck** teaches that the gas expansion engine is a turbo expander type expansion engine. See particularly Figure 2.

With respect to claim 14, **Kueck** teaches that the expansion engine and the electric generator are assemble as a unit. See particularly Figure 2.

With respect to claim 29, **Kueck** teaches the low pressure gas from the outlet of gas expansion engine 13 is used as fuel for engine 15 driving a second generator. See particularly Figure 1.

4. Claims 1, 2, 5, 7, 9, 12, 27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by **Shpak (US 5,425,230)**.

With respect to claims 1, 2, 12, 27 and 31, in Figure 1 **Shpak** teaches a system comprising: a supply of pressurized natural gas 6 at high pressure, a heat exchanger/pre-heater 4 for heating the pressurized gas before entering a gas expansion engine 1, said gas expansion

Art Unit: 3746

engine driving a generator 2 and expanding said pre-heated pressurized gas to a to a lower pressure, said low pressure natural gas being feed into a municipality gas distribution network which delivers said low pressure gas to the users. See particularly cl. 3 ll. 1-6; and Figure 1.

Note: The user's low pressure gas consuming device can be (stove, furnace, fire place).

With respect to claim 5, **Shpak** teaches that the source of heat comes from a recovered waste heat from a plant's process 3 via the heat exchanger 4. See Figure 1.

With respect to claim 7, **Shpak** teaches that the source of heat comes from a recovered waste heat from flue gas of process plant 3. See Figure 1.

With respect to claim 9, **Shpak** teaches that the gas expansion engine is a turbo expander type expansion engine 1. See Figure 1.

5. Claims 1, 2, 6, 9, 12, 13, 27 and 31 are rejected under 35 U.S.C. 102(b) as being anticipated by **Kaplan (US 5,392,605)**.

With respect to claims 1, 2, 12, 27 and 31, in Figure 1 **Kaplan** teaches a system comprising: a supply of pressurized natural gas 12 at high pressure, a heat exchanger/pre-heater 22 for heating the pressurized gas before entering a gas expansion engine 20, said gas expansion engine driving a generator 34 and expanding said pre-heated pressurized gas to a to a lower pressure, said low pressure natural gas being feed into a municipality gas distribution network which delivers said low pressure gas to the users. See particularly cl. 1 ll. 13-19; and Figure 1.

Note: The user's low pressure gas consuming device can be (stove, furnace, fire place).

With respect to claim 6, **Kaplan** teaches that the source of heat comes from boiler 38. See Figure 1.

Art Unit: 3746

With respect to claim 9, **Kaplan** teaches that the gas expansion engine is a turbo expander type expansion engine 20. See Figure 1.

With respect to claim 13, **Kaplan** teaches that the gas distribution network is a distribution system located downstream of a pressurized municipality gas supply gate 14. See Figure 1.

Allowable Subject Matter

6. Claims 4, 8 and 30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

7. Claims 15-17 are allowed.

Response to Arguments

8. Applicant's arguments with respect to claims 1-3, 5, 6, 7, 9, 12-14, 27, 29 and 31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William H. Rodríguez whose telephone number is 571-272-4831. The examiner can normally be reached on Monday-Friday 7:30 am to 5:00 pm.

Art Unit: 3746

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Timothy S. Thorpe can be reached on 571-272-4444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



William H. Rodriguez
Primary Examiner
Art Unit 3746

8/29/06